

Program

Coastal Zone Management

Zone

Coastal

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Coastal Resource Planning for
Stratham and Greenland

TASK 1: WATER RESOURCES PROTECTION ORDINANCES

1988-89 N.H. Coastal Program

March, 1989

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ATTACHMENT #6

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SECTION I: Amendment to the Wetlands Conservation District of the Town of Stratham.

Summary/Status: At the Stratham Town Meeting held on March 8, 1988, the above mentioned amendment to the wetlands ordinance was adopted. Its purpose was to establish regulatory buffers around wetlands and to limit the construction of buildings and septic systems in those areas.



PLANNING BOARD

Town of Stratham, New Hampshire 03885

The following is the complete text (deletions, insertions, and changes) of the proposed amendments to the Stratham Building Ordinance and Zoning Ordinance.

-- Add the following to Section 11.5 (p.45):

"11.5.3. Buffer Provisions

- a) No septic system, leach field or other waste disposal facility shall be installed within 75 feet of the edge of any poorly drained soil or within 100 feet of the edge of any very poorly drained soil.
- b) All construction, forestry and agriculture activities within 100 feet of any wetland shall be undertaken with special care to avoid erosion and siltation into the wetlands. The Planning Board may require an erosion control plan approved by the Rockingham County Conservation District for any project undertaken up-grade of a wetland. No building activity (building does not include septic systems) shall be permitted within 100 feet of any very poorly drained soil and within 50 feet of any poorly drained soil except as provided in subsection (c) of this section. Where required permits from the New Hampshire Water Supply and Pollution Control Commission, under RSA 149:8-a and the Wetlands Board under RSA 483-A shall be obtained.
- c) Where an existing building within the buffer zone is destroyed or in need of extensive repair it may be rebuilt provided that such rebuilding is completed within two years of the event causing destruction, the new or rebuilt structure shall not extend further into the wetland or buffer area than the original foundation."

(Note: Attached is Stratham's wetlands ordinance as of March 7, 1988. At the Stratham Town Meeting held on March 8, 1988, the above amendment to the wetlands ordinance was adopted.)

SECTION XI

WETLANDS CONSERVATION DISTRICT (OVERLAY)

11.1 PURPOSES

In the interest of public health, convenience, safety and welfare, the regulations of this District are intended to provide guidance for the use of areas of the land with standing water or extended periods of high water tables:

11.1.1. To control the development of structures and land uses on naturally occurring wetlands which would contribute to the pollution of surface and ground water by sewage.

11.1.2. To prevent the destruction of natural wetlands which provide flood protection, recharge the ground water supply and the augmentation of stream flow during dry periods.

11.1.3. To prevent unnecessary or excessive expenses to the Town to provide and maintain essential service and utilities which arise because of unwise use of wetlands.

11.1.4. To encourage those uses that can be appropriately and safely located in wetlands areas.

11.1.5. To preserve wetlands for other ecological reasons such as those cited in RSA 483-A:1-b.

11.1.6. To preserve and enhance those aesthetic values associated with wetlands of this Town.

11.2 AREA

11.2.1. The Stratham Wetlands Conservation District is defined as those areas of the Town that contain marshes, ponds, bogs, lakes, as well as soils that are defined as poorly or very poorly drained by the National Cooperative Soil Survey conducted by the USDA Soil Conservation Service.

The Stratham Wetlands Conservation District shall also include the borders of tidal marshes of the Squamscott River and Great Bay. Said borders are hereby defined as those areas adjacent to the Squamscott River and Great Bay with elevations of eight (8) feet or less above mean sea level (National Geodetic Vertical Datum of 1929).

11.2.2. The District as herein defined is shown on a map designated as the "Town of Stratham Wetlands Conservation District Map" and is a part of the official Zoning Map of the Town of

Stratham. Additional soil survey data prepared by a qualified soil scientist may be substituted for the Wetlands Conservation District Map in determining the location of wetlands.

For a detailed explanation of soil types, refer to "Soils and Their Interpretation for Various Land Uses, Town of Stratham, Rockingham County, New Hampshire" on file with the Planning Board and the soil Conservation Service in Exeter, N.H.

11.2.3. In all cases where the Wetland Conservation District is superimposed over another zoning district in the Town of Stratham, that district whose regulations are the most restrictive shall apply.

11.2.4. In case the Building Inspector questions the validity of the boundaries of a wetland area on any particular piece of property, or upon the written petition of the owner or any abutter of the said property to the Planning Board, the Board may call upon the services of a qualified soil scientist to examine said area and report his/her findings to the Planning Board for their determination of the boundary. A qualified soil scientist is interpreted to mean a person qualified in soil classification and who is recommended or approved by the Rockingham County Conservation District Supervisors. The cost of such appeal is to be borne by the petitioner.

11.3 PERMITTED USES

11.3.1. Permitted uses in areas containing poorly drained soils and within the tidal marsh borders of the Squamscott River and Great Bay as herein defined are as follows:

- (a) Any use otherwise permitted by the Zoning Ordinance and State and federal laws that does not involve the erection of a structure or that does not alter the surface configuration of the land by the addition of fill or by dredging except as a common treatment associated with a permitted use.
- (b) Agriculture, including grazing, hay production, truck gardening and silage production provided that such use is shown not to cause significant increases in surface or groundwater contamination by pesticides or other toxic or hazardous substances and that such use will not cause or contribute to soil erosion.
- (c) Forestry and tree farming to include the construction of access roads for said purpose. In areas herein defined as tidal marsh borders, the cutting of trees shall be limited to fifty percent (50%) of live trees in a 20 year period.
- (d) Wildlife habitat development and management.
- (e) Recreational uses consistent with the purpose and intent

- (f) Conservation areas and nature trails.
- (g) Water impoundment and the construction of well water supplies.
- (h) Drainage ways to include streams, creeks, or other paths of normal runoff water and common agricultural land drainage.

11.3.2. Permitted uses in areas containing very poorly drained soils, marshes, bogs, open water and major streams are as follows:

- (a) Uses specified under Section 11.3.1, (a-h) shall be permitted except that no alteration of the surface configuration of the land by filling or dredging and no use which results in the erection of a structure, except as provided for in Section 11.3.2 (b) below, shall be permitted.
- (b) The construction of fences, footbridges, catwalks and wharves only, provided: 1) said structures are constructed on posts or pilings so as to permit the unobstructed flow of water; 2) structures do not obstruct navigation on tidal creeks; 3) the natural contour of the wetland is preserved; and 4) the Planning Board has reviewed and approved the proposed construction.

11.4 CONDITIONAL USES

11.4.1. A Conditional Use Permit may be granted by the Planning Board (RSA 674:21 II) for the construction of roads and other access ways, and for pipelines, powerlines, and other transmission lines provided that all of the following conditions are found to exist;

- (a) The proposed construction is essential to the productive use of land not within the Wetlands Conservation District.
- (b) Design and construction methods will be such as to minimize detrimental impact upon the wetland.
- (c) The proposed construction design of powerlines, pipelines or other transmission lines includes provisions for restoration of the site as nearly as possible to its original grade and condition.
- (d) No alternative route which does not cross a wetland or has less detrimental impact on the wetland is feasible.
- (e) Economic advantage alone is not reason for the proposed construction.

- (e) Economic advantage alone is not reason for the proposed construction.

11.4.2. Prior to the granting of a Conditional Use Permit under this Section, the applicant shall agree to submit a performance security to the Board of Selectmen. The Security shall be submitted in a form and amount, with surety and conditions satisfactory to the Selectmen and approved by Town Counsel to ensure that the construction has been carried out in accordance with the approved design. The Security shall be submitted and approved prior to issuance of any permit authorizing construction.

11.4.3. The Planning Board may require the applicant to submit an environmental impact assessment when necessary to evaluate an application made under this Section. The cost of this assessment shall be borne by the applicant. The Planning Board may also assess the applicant reasonable fees to cover the costs of other special investigative studies and for the review of documents required by particular applications.

11.5 SPECIAL PROVISIONS

11.5.1. Poorly drained soils may be used to fulfill 25% of the minimum lot size required by Town ordinances, provided that the non-wetland area is sufficient in size and configuration to adequately accommodate all required utilities such as sewage disposal and water supply, including primary and auxiliary leach field locations.

11.5.2. No very poorly drained soils or bodies of water may be used to satisfy minimum lot size.

SECTION II: Proposed Wetlands Conservation District for the Town of Greenland.

Summary/Status: The proposed wetlands ordinance will be submitted to the Greenland Conservation Commission with the recommendation that it be considered for March 1990 Town Meeting.

GREENLAND WETLANDS CONSERVATION DISTRICT (OVERLAY)

A. Purpose and Intent

The purpose of this article is to protect the public health, safety and general welfare by controlling and guiding the use of land areas which have been found to be saturated or subjected to high water tables for extended periods of time -- including established and seasonal wetlands.

It is intended that this article shall:

1. Prevent the development of structures and land uses on naturally occurring wetlands which will contribute to pollution of surface and ground water by sewage or toxic substances or sedimentation;
2. Prevent the destruction of, or significant changes to, natural wetlands which provide flood protection, provide filtration of water flowing into ponds and streams, augment stream flow during dry periods and are connected to the ground or surface water supply;
3. Protect unique and unusual natural areas;
4. Protect wildlife habitats, maintain ecological balances and enhance ecological values such as those cited in RSA 483-A:1-b;
5. Protect potential water supplies and existing aquifers (water bearing stratum) and aquifer recharge areas;
6. Prevent unnecessary or excessive expense to the Town for the purpose of providing and/or maintaining essential services and utilities which might be required as a result of misuse or abuse of wetlands;
7. Encourage those low-intensity uses that can be harmoniously, appropriately and safely located in wetlands;
8. Preserve and enhance the aesthetic values associated with wetlands in the Town of Greenland;
9. Prevent damage to structures and properties caused by inappropriate development in wetlands.

B. Definitions

High Intensity Soil Maps for New Hampshire: The most recent document prepared by the Society of Soil Scientists of Northern New England detailing the standards for making high intensity soil maps. On file with the Rockingham County Conservation District.

Poorly Drained Soil: As defined by the National Cooperative Soil Survey or further defined by High Intensity Soil Maps for New Hampshire. On file with the Rockingham County Conservation District.

Qualified Soil Scientist: A person qualified in soil classification and mapping who is recommended or approved by the New Hampshire State Conservation Committee.

Very Poorly Drained Soils: As defined by the National Cooperative Soil Survey or further detailed by High Intensity Soil Maps for New Hampshire. On file with the Rockingham County Conservation District.

C. Wetlands Defined

Wetlands are areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal conditions do support a prevalence of vegetation typically adapted for life in saturated soil conditions. They include, but are not limited to, swamps, bogs, marshes, ponds, lakes, as well as soils that are defined as poorly or very poorly drained.

1. Location of District

The location of a wetland boundary in any particular case must be determined by onsite inspection of soil types and vegetation. This data will be prepared by a qualified soil scientist using the standards of High Intensity Soil Maps for New Hampshire.

2. Boundary Appeals

In the event that the Building Inspector or Conservation Commission questions the validity of the boundaries of a wetland area on a specific parcel of land, or upon the written petition of the owner or any abutter of the said property to the Planning Board, the Board may call upon the services of a qualified soil scientist to examine said area and report the findings to the Planning Board for their determination of the boundary.

Any necessary soil testing procedures shall be conducted at the expense of the landowner or developer. Any costs incurred through such appeals shall be borne by the landowner or developer.

E. Relation to Other Districts

Where the Wetlands Conservation District is superimposed over another zoning district, the more restrictive regulations shall apply.

F. Permitted Uses

1. Poorly Drained Soils: Permitted uses in areas of poorly drained soils are as follows:

- a. Any use otherwise permitted by the Zoning Ordinance and state and federal laws that does not involve the erection of a structure or that does not alter the surface configuration of the land by the addition of fill or by dredging except as a common treatment associated with a non-residential permitted use (listed below).
- b. Agriculture, including grazing, hay production, truck gardening and silage production provided that such use is shown not to cause significant increases in surface or ground water contamination by pesticides or other toxic or hazardous substances and that such use will not cause or contribute to soil erosion.

- c. Forestry and tree farming to include the construction of access roads for said purpose.
 - d. Wildlife habitat development and management.
 - e. Recreational uses consistent with the purpose and intent of this Article as defined in Section A.
 - f. Conservation areas and nature trails.
 - g. Water impoundment and the construction of well water supplies.
 - h. Drainageways to include streams, creeks, or other paths of normal runoff water and common agricultural land drainage.
2. Very Poorly Drained Soils: Permitted use in such areas containing very poorly drained soils, marshes, bogs, open water and major streams are as follows:
- a. Uses specified under Section F.1 (a. through h.) shall be permitted except that no alteration of the surface configuration of the land by filling or dredging and no use which results in the erection of a structure, except as provided for in Section J, shall be permitted.
 - b. The construction of fences, footbridges, catwalks, and wharves only, provided: (1) said structures are constructed on posts or pilings so as to permit unobstructed flow of water; (2) the natural contour of the wetland is preserved; and (3) the Conservation Commission has reviewed and recommended the proposed construction.
3. Lot Size Determination: Areas designated as having poorly drained soils may be used to fulfill 25% of the minimum lot size required by town ordinances and subdivision regulations, provided that the non-wetland area is sufficient in size and configuration to adequately accommodate all required structures including utilities such as sewage disposal and water supply, including primary and auxiliary leach field locations.

No part of areas designated as having very poorly drained soils, or bodies of water, may be used to satisfy minimum lot size.

G. Buffer Provisions

1. No septic system, leach field or other waste disposal facility shall be installed within 75 feet of the edge of any poorly drained soil or within 100 feet of the edge of any very poorly drained soil.
2. All construction, forestry and agriculture activities within 100 feet of any wetland shall be undertaken with special care to avoid erosion and siltation into the wetlands. The Planning Board may require an erosion control plan approved by the Rockingham County Conservation District for any project undertaken up-grade of a wetland. No building activity (building does not include septic systems) shall be permitted within 100 feet of any very poorly drained soil and within 50 feet of any poorly drained soil except as provided in subsection 3 of this section. Where required permits from the New Hampshire Water Supply

and Pollution Control Commission, under RSA 149:8-a and the Wetlands Board under RSA 483-A shall be obtained.

3. Where an existing building within the buffer zone is destroyed or in need of extensive repair it may be rebuilt provided that such rebuilding is completed within two years of the event causing destruction, the new or rebuilt structure shall not extend further into the wetland or buffer area than the original foundation.

H. Filled Lands and Pre-existing Uses

1. Lands, which may have been wetlands but were filled under properly issued state and town permits granted prior to the adoption of this ordinance, shall be judged according to the soils and flora existing at the site at the time application for building permit or subdivision is made.
2. Structures and uses existing at the time of the adoption of this ordinance may be continued provided that such use shall not be expanded to further encroach upon the wetlands or designated buffer areas.

I. Exemption for Residential Structures

Notwithstanding other provisions of this Article, the construction of additions and extensions to one and two-family dwellings shall be permitted within the Wetlands Conservation District provided that: (1) the dwelling lawfully existed prior to the effective date of this Article; and (2) that the proposed construction conforms with all other applicable ordinances and regulations of the Town of Greenland.

J. Conditional Uses

1. A Conditional Use Permit may be granted by the Planning Board (RSA 674:21 II) for the construction of roads and other access ways, and for pipelines, powerlines, and other transmission lines provided that all of the following conditions are found to exist:
 - a. The proposed construction is essential to the productive use of land not within the Wetlands Conservation District.
 - b. Design and construction and maintenance methods will be such as to minimize detrimental impact upon the wetland and will include restoration of the site as nearly as possible to its original grade and condition.
 - c. No alternative route which does not cross a wetland or has less detrimental impact on the wetland is feasible.
 - d. Economic advantage alone is not reason for the proposed construction.
2. Prior to the granting of a Conditional Use Permit under this Section, the applicant shall agree to submit a performance security to ensure that all construction is carried out in accordance with an approved design. The Security shall be submitted in a form and amount, with surety and conditions satisfactory to 1) the Planning Board for site plan and subdivision applications and 2) the Board of Selectmen in all other cases. In addition, Town Counsel approval must be obtained.

The Security shall be submitted and approved prior to issuance of any permit authorizing construction.

3. The Planning Board, with the concurrence of the Conservation Commission, may require the applicant to submit an environmental impact assessment when necessary to evaluate an application made under this Section. The cost of this assessment shall be borne by the applicant. The Planning Board may also assess the applicant reasonable fees to cover the costs of other special investigative studies and for the review of documents required by particular applications.

K. Special Exceptions

1. Water impoundments for the enhancement of a wetland area with a permit from N.H. Water Resources Board.

Where required, permits shall be obtained from the New Hampshire Water Supply and Pollution Control Commission under RSA 149:8-a, the Wetlands Board under RSA 483-A, and the United States Army Corps of Engineers.

2. Non-Conforming Lots

Special exception to this ordinance shall be permitted only upon authorization by the Board of Adjustment. In order to permit the erection of a structure within the Wetlands Conservation District on vacant lots, the Board shall find that such exceptions comply with the following requirements and other applicable requirements as set forth in this ordinance:

- a. That the lot upon which an exception is sought was an official lot of record, as recorded in the Rockingham County Registry of Deeds, prior to the date on which this amendment was posted and published in the Town.
- b. That the use for which the exception is sought cannot feasibly be carried out on a portion or portions of the lot which are outside the Wetlands Conservation District.
- c. That due to the provisions of the Wetlands Conservation District, no reasonable and economically viable use of the lot can be made without the exception.
- d. That the design and construction of the proposed use will, to the extent practical, be consistent with the purpose and intent of this Article.
- e. That the proposed use will not create a hazard to individual or public health, safety and welfare due to the loss of wetland, the contamination of groundwater, or other reason.

The Board of Adjustment may themselves, or upon petition from the Building Inspector, Conservation Commission or abutters, hire a qualified consultant or consultants to prepare such studies as are necessary to determine whether the conditions set forth above have been met. The cost of such studies shall be borne by the applicant.

L. Procedure

Special Exceptions shall only be granted by the Board of Adjustment, after due public notice and public hearing for undertaking the preceding uses in the Wetlands Conservation District, when the application has been referred to the Planning Board, the Conservation Commission, and to the Health Officer for review and comment at least twenty (20) days prior to the hearing.

K. Other Provisions

1. The Building Inspector shall not issue any permit for construction within the Wetlands Conservation Overlay District unless such activity conforms with the provisions of this Article. The Board of Selectmen shall have the power to enforce this Article and violations may be punishable by fines as provided by RSA 676:17.
2. Any wetlands altered in violation of this ordinance shall be restored at the expense of the violator(s) as provided by RSA 483-A:5.

SECTION III: Proposed Aquifer Protection District for the Town of Stratham.

Summary/Status: Submitted to the Stratham Conservation Commission in December 1988, with the recommendation that it be considered for adoption at March 1990 Town Meeting.

* D R A F T *

**PROPOSED AQUIFER PROTECTION DISTRICT
Town of Stratham**

1. AUTHORITY AND PURPOSE

Pursuant to RSA 674:16-21, the Town of Stratham adopts an Aquifer Protection District and accompanying regulations in order to protect, preserve and maintain potential groundwater supplies and related groundwater recharge areas within the Town. The objectives of the aquifer protection district are:

- a. To protect the public health and general welfare of the citizens of Stratham..;
- b. To prevent development and land use practices that would contaminate or reduce the recharge of the identified aquifers;
- c. To provide for future growth and development of the Town, in accordance with the Master Plan, by insuring the future availability of public and private water supplies;
- d. To encourage uses that can appropriately and safely be located in the aquifer recharge areas.

2. DEFINITIONS

Animal Feedlot: A commercial agricultural establishment consisting of confined feeding areas and related structures used for the raising of livestock. An animal feedlot shall be considered one on which more than five (5) adult animals are raised simultaneously.

Aquifer: For the purpose of this Ordinance, aquifer means a geologic formation, group of formations, or part of a formation that is capable of yielding quantities of groundwater usable for municipal or private water supplies.

Bulk Storage: Storage of materials intended for wholesale distribution or for use in a manufacturing or repair facility.

Dwelling Unit: A building or that portion of a building consisting of one or more rooms designed for living and sleeping purposes, including kitchen and sanitary facilities and intended for occupancy by not more than one family or household.

Groundwater: All the water below the land surface in the zone of saturation or in rock fractures capable of yielding water to a well.

Groundwater Recharge: The infiltration of precipitation through surface soil materials into groundwater. Recharge may also occur from surface waters, including lakes, streams and wetlands.

Leachable Wastes: Waste materials, including solid wastes, sludge and agricultural wastes that are capable of releasing contaminants to the surrounding environment.

Mining of Land: The removal of geologic materials such as topsoil, sand and gravel, metallic ores, or bedrock to be crushed or used as building stone.

Non-Conforming Use: Any lawful use of buildings, structures, premises, land or parts thereof existing as of the effective date of this Ordinance, or amendment thereto, and not in conformance with the provisions of this Ordinance, shall be considered to be a non-conforming use.

Non-Municipal Well: Any well not owned and operated by the Town of Stratham or its agent.

Recharge Area: The land surface area from which groundwater recharge occurs.

Sludge: Residual materials produced by the sewage treatment process.

Solid Waste: Any discarded or abandoned material including refuse, putrescible material, septage, or sludge, as defined by New Hampshire Solid Waste Rules He-P 1901.03. Solid waste includes solid, liquid, semi-solid, or gaseous waste material resulting from residential, industrial, commercial, mining, and agricultural operations.

Structure: Anything constructed or erected, except a boundary wall or fence, the use of which requires location on the ground or attachment to something on the ground.

Toxic or Hazardous Materials: Any substance or mixture of such physical, chemical, or infectious characteristics as to pose a significant, actual or potential hazard to water supplies, or other hazard to human health, if such substance or mixture were discharged to land or waters of the Town. Toxic or hazardous materials include, without limitation, volatile organic chemicals, petroleum products, heavy metals, radioactive or infectious wastes, acids and alkalies, and include products such as pesticides, herbicides, solvents and thinners, and such other substances as defined in New Hampshire Water Supply and Pollution Control Rules, Section Ws 410.04 (1), in New Hampshire Solid Waste Rules He-P 1901.03 (v), and in the Code of Federal Regulations 40 CFR 261 as amended. Wastes generated by the following commercial activities are presumed to be toxic or hazardous, unless and except to the extent that anyone engaging in such an activity can demonstrate the contrary to the satisfaction of the Planning Board:

- Airplane, boat and motor vehicle service and repair;
- Chemical and bacteriological laboratory operation;
- Dry Cleaning;
- Electronic circuit manufacturing;
- Metal plating, finishing and polishing;
- Motor and machinery service and assembly;
- Painting, wood preserving and furniture stripping;
- Pesticide and herbicide application;
- Photographic processing;
- Printing.

3. DISTRICT BOUNDARIES

A. Location

The Aquifer Protection District is defined as the area shown on the map entitled, "Aquifer Protection District," and is hereby adopted as part of the official Zoning Map of the Town of Stratham. The Aquifer Protection District includes the area delineated by [Note: include here a description of information sources such as U.S.G.S. aquifer delineation studies, engineering studies, or master plan map used to delineate the aquifer].

The Aquifer Protection District is a zoning overlay district which imposes additional requirements and restrictions to those of the underlying district. In all cases, the more restrictive requirement(s) shall apply.

B. Appeals

Where the bounds of an identified aquifer or recharge area, as delineated, are in doubt or in dispute, any landowner aggrieved by such delineation may appeal the boundary location to the Planning Board. Upon receipt of a written appeal, the Planning Board shall suspend further action on development plans related to the area under appeal and shall engage, at the landowner's expense, a qualified hydrogeologist to prepare a report determining the proper location and extent of the aquifer and recharge area relative to the property in question. The aquifer delineation, as it pertains to the property in question, shall be modified by such determination subject to review and approval by the Planning Board.

4. USE REGULATIONS

A. Minimum Lot Size

The minimum lot size within the Aquifer Protection District for each dwelling unit if a residential use, or each principal building if a non-residential use, shall beacres, orsquare feet.

B. Maximum Lot Coverage

Within the Aquifer Protection District, no more than ten percent (10%) of a single lot, may be rendered impervious to groundwater infiltration for residential uses. Up to 25% of a single lot may be made impervious for commercial, industrial and institutional uses provided that on site recharge of runoff from roofed and paved areas is provided for.

1 Minimum lot sizes should be based on the maximum build-out that maintains groundwater quality in the identified aquifer such that total nitrate-nitrogen ($\text{NO}_3\text{-N}$) does not exceed 5 mg/l. In the absence of such analyses we recommend a minimum lot size of between two (2) acres (87,120 square feet) and three (3) acres (130,680 square feet) depending on development patterns, development suitability, percentage of town affected, and whether or not the aquifer is used, or will likely be used, as a public water supply.

C. Prohibited Uses

The following uses are prohibited in the Aquifer Protection Zone except where permitted to continue as non-conforming uses. Prohibited uses shall include, but not be limited to:

- 1) Disposal of solid waste (as defined by N.H. RSA 149-M) other than brush or stumps generated on the property on which they are to be disposed.
- 2) On-site disposal, bulk storage, processing or recycling of toxic or hazardous materials or wastes.
- 3) Disposal of liquid or leachable wastes except that from one- or two-family residential subsurface disposal systems, or as otherwise permitted as a conditional use.
- 4) Buried storage of petroleum fuel and other refined petroleum products except as regulated by the NH Water Supply and Pollution Control Commission (Ws 411 Control of Non-residential Underground Storage and Handling of Oil and Petroleum Liquids). Storage tanks for petroleum products, if contained within basements, are permitted.
- 5) Outdoor unenclosed or uncovered storage of road salt and other de-icing chemicals.
- 6) Dumping of snow containing road salt or other de-icing chemicals.
- 7) Animal feedlots.
- 8) Automotive service and repair shops, junk and salvage yards.
- 9) Dry cleaning establishments.
- 10) Laundry and car wash establishments not served by a central municipal sewer system.
- 11) Industrial uses which discharge contact type wastes on site.
- 12) Waste injection wells.

D. Conditional Uses

- 1) The following uses, if allowed in the underlying zoning district, are permitted only after a Conditional Use permit is granted by the Stratham Planning Board:
 - a) Industrial and commercial uses not otherwise prohibited in Section 4 of this Article.
 - b) Multi-family residential development.

- c) Sand and gravel excavation and other mining provided that such excavation or mining is not carried out within eight (8) vertical feet of the seasonal high water table and that periodic inspections are made by the Planning Board or its agent to determine compliance.
- 2) The Planning Board may grant a Conditional Use Permit for those uses listed above only after written findings of fact are made which certify that all of the following are true:
- a) the proposed use will not detrimentally affect the quality of the groundwater contained in the aquifer by directly contributing to pollution or by introducing toxic and hazardous materials to the aquifer or by causing the average concentration of nitrate-nitrogen ($\text{NO}_3\text{-N}$) to exceed 5 mg/l beyond the affected property boundaries;
 - b) the proposed use will not cause a significant long term reduction in the volume of water contained in the aquifer or in the storage capacity of the aquifer;
 - c) the proposed use will discharge no waste water on site other than that typically discharged by domestic waste water disposal systems and will not involve on-site storage or disposal of toxic or hazardous materials as herein defined;
 - d) the proposed use complies with all other applicable sections of this Article.
- 3) All Conditional Uses shall be subject to twice-annual inspections by the Building Inspector or other agent designated by the Selectmen. The purpose of these inspections is to ensure continued compliance with the conditions under which approvals were granted. A fee for inspection shall be charged to the owner according to a fee schedule adopted by the Selectmen.

E. Permitted Uses

The following activities may be permitted provided they are conducted in accordance with the purposes and intent of this Ordinance:

- 1) Any use permitted by the underlying district of the Zoning Ordinance, except as prohibited in Section 4c. or regulated by Conditional Use in Section 4d. of this Article.
- 2) Maintenance, repair of any existing structure, provided there is no increase in impermeable surface above the limit established in Section 4.b. of this Article.
- 3) Farming, gardening, nursery, forestry, harvesting and grazing, provided that fertilizers, pesticides, manure and other leachables are used according to best management practices as prescribed by the Rockingham County Conservation District, if applicable, and at levels that will not cause groundwater contamination. All said leachables must be stored under shelter.

F. Special Exception for Lots of Record

Upon application to the Board of Adjustment, a special exception shall be granted to permit the erection of a structure within the Aquifer Protection District on a non-conforming lot provided that all of the following conditions are found to exist.

- 1) The lot upon which an exception is sought was an official lot of record, as recorded in the Rockingham County Registry of Deeds, prior to the date on which this amendment was posted and published in the Town.
- 2) The use for which the exception is sought cannot feasibly be carried out on a portion or portions of the lot which are outside the Aquifer Protection District.
- 3) Due to the provisions of the Aquifer Protection District, no reasonable and economically viable use of the lot can be made without the exception.
- 4) The design and construction of the proposed use will, to the extent practical, be consistent with the purpose and intent of this Section.

G. Non-Conforming Uses

Any non-conforming use may continue and may be maintained, repaired and improved, unless such use is determined to be an imminent hazard to the groundwater or recharge areas. No non-conforming use may be expanded, changed to another non-conforming use, or renewed after it has been discontinued for a period of 12 months or more.

5. HYDROGEOLOGIC STUDY

A. Within the Aquifer Protection District, a hydrogeologic study shall be required for the following:

- 1) developments involving the subdivision of ten (10) lots or greater;
- 2) developments resulting in the installation of a septic system, or series of septic systems, designed to dispose 2,400 gallons or more of wastewater per day.

For residential subdivisions of fewer than ten (10) lots, and for commercial, industrial and institutional uses which produce less than 2,400 gpd of wastewater, the Planning Board shall determine the needs for a hydrogeologic study on a case by case basis. Their determination shall consider potential threats of the use proposed and characteristics of the site.

B. Standards

Hydrogeologic studies shall be performed by a qualified hydrogeologist. These studies shall be sufficiently detailed to evaluate the development's impacts to groundwater within the parcel to be developed and the surrounding land. All hydrogeologic studies shall include at least the following:

- 1) An adequate number of subsurface borings in order to determine the site geology and stratigraphy. Boring requirements are as follows:
 - a) For sites up to 30 acres, the parcel shall contain a minimum of one boring per three acres, with a minimum of three borings for a site. For sites greater than 30 acres, additional borings of at least one per 10 acres are required.
 - b) At least twenty percent (20%) of the borings shall be sampled utilizing the "split spoon" sampling technique.
 - c) At least one boring shall be dug to bedrock.
- 2) Identification of water table contours and groundwater flow directions, with water table measurements using a series of shallow observation wells screened at the water table. The number of observation wells required shall be the same as the number of borings required.
- 3) Water quality sampling and analysis to determine existing conditions, measuring the following parameters: nitrate-nitrogen ($\text{NO}_3\text{-N}$), ammonia-nitrogen ($\text{NH}_3\text{-N}$), pH, and specific conductance.
- 4) An analysis of cumulative impact nitrogen loading employing a saturation build-out model. The analysis shall include verification that the development will not cause the nitrate-nitrogen ($\text{NO}_3\text{-N}$) concentration to exceed 5 mg/l in the groundwater at the down-gradient property boundary.

6. DESIGN AND PERFORMANCE STANDARDS

A. Nitrate loading

No development shall cause the nitrate-nitrogen ($\text{NO}_3\text{-N}$) concentration to exceed 5 mg/l in the groundwater beyond the site.

B. Safeguards

Provision shall be made to protect against toxic or hazardous materials discharge or loss resulting from corrosion, accidental damage, spillage, or vandalism through measures such as: spill control provisions in the vicinity of chemical or fuel delivery points; secured storage areas for toxic or hazardous materials; and indoor storage provisions for corrodable or dissolvable materials. For operations which allow the evaporation of toxic or hazardous materials into the interiors of any structures, a closed vapor recovery system shall be provided for each such structure to prevent discharge of contaminated condensate into the groundwater.

C. Location

Where the premises are partially outside of the Aquifer Protection Overlay Zone, potential pollution sources such as on-site waste disposal systems shall be located outside and down gradient of the Zone to the extent feasible.

D. Drainage

All runoff from impervious surfaces shall be recharged on the site, and diverted toward areas covered with vegetation for surface infiltration to the extent possible. Dry wells shall be used only where other methods are not feasible, and shall be preceded by oil, grease, and sediment traps to facilitate removal of contaminants.

E. Septic System Design and Installation

Septic systems shall be constructed in accordance with the "Subdivision and Individual Sewage Disposal System Design Rules" (N.H. Code of Administrative Rules, Chapter Ws 1000). However, any Town ordinance or regulation that is more restrictive shall apply. All new or reconstructed on-lot waste water disposal systems constructed in the Aquifer Protection District shall be designed by a Sanitary Engineer licensed in New Hampshire. These systems shall be installed under the supervision of said engineer.

The designated Town engineer or septic system inspector of the Town shall inspect the installation of each new system prior to covering, and shall certify that the system has been installed as designed.

The following site requirements shall apply to all septic system construction in the Aquifer Protection District:

- 1) At least 24 inches of natural permeable soil shall exist above the seasonal high water table.
- 2) At least four feet of natural soil shall exist above bedrock.
- 3) At least three feet of natural permeable soil shall exist above any impermeable subsoil.
- 4) No filling of wetlands shall be allowed to provide the minimum distance of septic systems to wetlands.
- 5) Fill material used for septic system construction shall be generally homogeneous and shall not contain:
 - more than 15% organic soil by volume;
 - more than 25% cobbles (6 in. diameter) by volume;
 - more than 15% of clay (0.002 mm particles or smaller) by weight;
 - tree stumps, mulch, bark or other large organic matter.

8. ADMINISTRATION

A. General

The provisions of the Aquifer Protection District shall be administered by the Planning Board. All development proposals, other than single or two-family residential construction not involving the subdivision of land, shall be subject to subdivision and/or site plan review and approval in accordance with Planning Board rules and regulations. Such review and approval shall precede the issuance of any building permit by the Town.

B. Enforcement

The Board of Selectmen shall be responsible for the enforcement of the provisions and conditions of the Aquifer Protection District.

SECTION IV: Proposed Aquifer Protection District for the Town of Greenland.

Summary/Status: At the Greenland Town Meeting held March 14, 1989, the proposed Aquifer Protection District ordinance was adopted.

To be added to the Greenland Town Warrant for the year ending December 31, 1988:

Q. ARE YOU IN FAVOR OF THE ADOPTION OF AMENDMENT #17 AS PROPOSED BY THE PLANNING BOARD FOR THE TOWN ZONING ORDINANCE AS FOLLOWS:

Add a new section, "Aquifer Protection District", to read as follows:

ARTICLE XXIII.

AQUIFER PROTECTION DISTRICT

1. AUTHORITY AND PURPOSE

Pursuant to RSA 674:16-21, the Town of Greenland hereby adopts an Aquifer Protection District and accompanying regulations in order to protect, preserve and maintain potential groundwater supplies and related groundwater recharge areas within a known aquifer identified by the United States Geological Survey. The objectives of the aquifer protection district are:

- a. to encourage uses that can appropriately and safely be located in the aquifer recharge areas.
- b. to promote future growth and development of the Town, in accordance with the Master Plan, by ensuring the future availability of public and private water supplies.

2. DEFINITIONS

Animal Feedlot: A commercial agricultural establishment consisting of confined feeding areas and related structures used for the raising of livestock. An animal feedlot shall be considered one on which more than five (5) animals are raised simultaneously.

Aquifer: For the purpose of this Ordinance, aquifer means a geologic formation, group of formations, or part of a formation that is capable of yielding quantities of groundwater usable for municipal or private water supplies.

Dwelling Unit: A building or that portion of a building consisting of one or more rooms designed for living and sleeping purposes, including kitchen and sanitary facilities and intended for occupancy by not more than one family or household.

Groundwater: All the water below the land surface in the zone of saturation capable of yielding water to a well.

Groundwater Recharge: The infiltration of precipitation through surface soil materials into groundwater. Recharge may also occur from surface waters, including lakes, streams and wetlands.

Leachable Wastes: Waste materials, including solid wastes, sludge and agricultural wastes that are capable of releasing contaminants to the surrounding environment.

Mining of Land: The removal of geologic materials such as topsoil, sand and gravel, metallic ores, or bedrock to be crushed or used as building stone.

Non-Conforming Use: Any lawful use of buildings, structures, premises, land or parts thereof existing as of the effective date of this Ordinance,

or amendment thereto, and not in conformance with the provisions of this Ordinance, shall be considered to be a non-conforming use.

Non-Municipal Well: Any well not owned and operated by the Town of Greenland or its agent.

Recharge Area: The land surface area from which groundwater recharge occurs.

Sludge: Residual materials produced by the sewage treatment process.

Solid Waste: Any discarded or abandoned material including refuse, putrescible material, septage, or sludge, as defined by New Hampshire Solid Waste Rules He-P 1901.03. Solid waste includes solid, liquid, semi-solid, or contain gaseous waste material resulting from residential, industrial, commercial, mining, and agricultural operations.

Structure: Anything constructed or erected, except a boundary wall or fence, the use of which requires location on the ground or attachment to something on the ground. For the purposes of this Ordinance, buildings are structures.

Toxic or Hazardous Materials: Any substance or mixture of such physical, chemical, or infectious characteristics as to pose a significant, actual or potential hazard to water supplies, or other hazard to human health, if such substance or mixture were discharged to land or waters of this Town. Toxic or hazardous materials include, without limitation, volatile organic chemicals, petroleum products, heavy metals, radioactive or infectious wastes, acids and alkalies, and include products such as pesticides, herbicides, solvents and thinners, and such other substances as defined in New Hampshire Water Supply and Pollution Control Rules, Section Ws. 410.04 (1), in New Hampshire Solid Waste Rules He-P 1901.03 (v), and in the Code of Federal Regulations 40 CFR 261. Wastes generated by the following commercial activities are presumed to be toxic or hazardous, unless and except to the extent that anyone engaging in such an activity can demonstrate the contrary to the satisfaction of the Planning Board:

- Airplane, boat and motor vehicle service and repair;
- Chemical and bacteriological laboratory operation;
- Dry Cleaning;
- Electronic circuit manufacturing;
- Metal plating, finishing and polishing;
- Motor and machinery service and assembly;
- Painting, wood preserving and furniture stripping;
- Pesticide and herbicide application;
- Photographic processing;
- Printing.

3. DISTRICT BOUNDARIES

a. Location

The Aquifer Protection District is defined as the area shown as "Aquifer Protection" on the map entitled "Future Land Use", contained

in the Greenland Master Plan. Said zone is hereby adopted as part of the Official Zoning Map of the Town of Greenland.

The Aquifer Protection District is a zoning overlay district which imposes additional requirements and restrictions to those of the underlying, base district zoning. In all cases, the more restrictive requirement(s) shall apply.

b. Recharge Areas

For the purpose of this Ordinance, the primary recharge area for the identified aquifer is considered to be co-terminus with that aquifer.

No secondary recharge area has been identified at the time of enactment.

c. Appeals

Where the bounds of the identified aquifer or recharge area, as delineated, are in doubt or in dispute, any landowner aggrieved by such delineation may appeal the boundary location to the Planning Board. Upon receipt of such appeal, the Planning Board shall suspend further action on development plans related to the area under appeal and shall engage, at the landowner's expense, a qualified hydrogeologist to prepare a report determining the proper location and extent of the aquifer and recharge area relative to the property in question. The aquifer delineation shall be modified with a determination of the edge of the stratified sand and gravel formation, subject to review and approval by the Planning Board.

4. USE REGULATIONS

a. Minimum Lot Size

The minimum lot size within the Aquifer Protection District for each dwelling unit if a residential use, or each principal building if a non-residential use, shall be 60,000 square feet.

b. Hydrogeologic Study

For development proposals within the Aquifer Protection District, a hydrogeologic study shall be required for the following:

- 1) subdivisions of ten (10) lots or greater;
- 2) any septic system, or series of septic systems, designed for 2,400 gallons per day or greater, contained within one lot.

Hydrogeologic studies shall be performed by a qualified hydrogeologist. These studies shall be sufficiently detailed to evaluate the development's impacts to groundwater within both the parcel to be developed and the surrounding land.

All hydrogeologic studies shall include at least the following:

- 1) An appropriate number of subsurface borings in order to determine the site geology and stratigraphy. For sites up to 30 acres, the parcel shall contain a minimum of one boring per three acres, with a minimum of five borings for a site. For sites greater than 30 acres, additional borings of one per 10 acres is required.
 - a) Twenty percent (20%) of the borings shall be sampled utilizing the "split spoon" sampling technique.
 - b) At least one boring shall be dug to bedrock.
- 2) Water table contours and groundwater flow directions, with water table measurements using a series of shallow observation wells screened at the water table. The number of observation wells required shall be the same as the borings above.
- 3) Water quality sampling and analysis to determine existing conditions, measuring the following parameters: $\text{NO}_3\text{-N}$, $\text{NH}_3\text{-N}$, pH, and specific conductance.
- 4) Cumulative impact nitrogen loading analysis employing a saturation build-out model. The analysis shall include verification that the development will not cause the nitrate-nitrogen ($\text{NO}_3\text{-N}$) concentration to exceed 5 mg/l in the groundwater at the down-gradient property boundary.

c. Maximum Lot Coverage

Within the Aquifer Protection District, no more than 20 percent of a single lot may be rendered impervious to groundwater infiltration for residential uses, and no more than 35 percent for commercial/industrial uses. The use of detention ponds is encouraged.

d. Septic System Design and Installation

In addition to meeting all local and state septic system siting requirements, all new on-lot waste water disposal systems installed in the Aquifer Protection District shall be designed by a Sanitary Engineer licensed in New Hampshire. These systems shall be installed under the supervision of said engineer.

A designated engineer of the Town shall inspect the installation of each new system prior to covering, and shall certify that the system has been installed as designed.

Septic systems are to be constructed in accordance with the most recent edition of the "Guide for the Design, Operation and Maintenance of Small Sewage Disposal Systems" as published by the New Hampshire Water Supply and Pollution Control Division.

However, the following more stringent requirements shall apply to all septic system construction:

1. No filling of wetlands allowed to provide the minimum distance of septic systems to wetlands (Ws 1007.04).

2. Standards for fill material: Fill material consisting of organic soils or other organic materials such as tree stumps, sawdust, wood chips and bark, even with a soil matrix, shall not be used.

The in-place fill should have less than 15% organic soil by volume.

The in-place fill should not contain more than 25% by volume of cobbles (6 inch diameter).

The in-place fill should not have more than 15% by weight of clay size (0.002mm and smaller) particles.

The fill should be essentially homogeneous. If bedding planes and other discontinuities are present, detailed analysis is necessary.

e. Prohibited Uses

The following uses are prohibited in the Aquifer Protection Zone except where permitted to continue as a non-conforming use. Such prohibited uses shall include, but not be limited to:

1. Disposal of solid waste (as defined by N.H. RSA 149-M) other than brush or stumps generated on the property on which they are to be disposed.
2. Storage and disposal of hazardous waste.
3. Disposal of liquid or leachable wastes except that from one- or two-family residential subsurface disposal systems, or as otherwise permitted as a conditional use.
4. Subsurface storage of petroleum and other refined petroleum products.
5. Industrial uses which discharge contact type process waters on-site. Non-contact cooling water is permitted.
6. Unenclosed storage of road salt or other de-icing chemicals.
7. Dumping of snow containing de-icing chemicals brought from outside the district.
8. Commercial animal feedlots.
9. Dry cleaning establishments.
10. Automotive service and repair shops, junk and salvage yards.
11. Laundry and car wash establishments not served by a central municipal sewer system.
12. All on site handling, disposal, storage, processing or recycling of hazardous or toxic materials.

f. Permitted Uses

The following activities may be permitted provided they are conducted in accordance with the purposes and intent of this Ordinance:

1. Any use permitted by the Greenland Zoning Ordinance, except as prohibited in Section 4 of this article.
2. Activities designed for conservation of soil, water, plants and wildlife.
3. Outdoor recreation, nature study, boating, fishing and hunting where otherwise legally permitted.
4. Normal operation and maintenance of existing water bodies and dams, splash boards and other water control, supply and conservation devices.
5. Foot, bicycle, and/or horse paths and bridges.
6. Maintenance, repair of any existing structure, provided there is no increase in impermeable surface above the limit established in Section 4.c. of this Article.
7. Farming, gardening, nursery, forestry, harvesting and grazing, provided that fertilizers, herbicides, pesticides, manure and other leachables are used appropriately at levels that will not cause groundwater contamination and are stored under shelter.

g. Conditional Uses

The following uses, if allowed in the underlying zoning district, are permitted only after a Conditional Use Permit is granted by the Greenland Planning Board:

1. Industrial and commercial uses not otherwise prohibited in Section 4 of this Article.
2. Multi-family residential development.
3. Sand and gravel excavation and other mining provided that such excavation or mining is not carried out within eight (8) vertical feet of the seasonal high water table and that periodic inspections are made by the Planning Board or its agent to determine compliance.

The Planning Board may grant a Conditional Use Permit for those uses listed above only after written findings of fact are made that all of the following conditions are met:

1. the proposed use will not detrimentally affect the quality of the groundwater contained in the aquifer by directly contributing to pollution or by increasing the long-term susceptibility of the aquifer to potential pollutants;

- ii. the proposed use will not cause a significant reduction in the long-term volume of water contained in the aquifer or in the storage capacity of the aquifer;
- iii. the proposed use will discharge no waste water on site other than that typically discharged by domestic waste water disposal systems and will not involve on-site storage or disposal of toxic or hazardous wastes as herein defined;
- iv. the proposed use complies with all other applicable sections of this Article.
- v. a hydrogeologic study shall be submitted for uses which will discharge more than 2,400 g.p.d.

The Planning Board may require that the applicant provide data or reports prepared by a qualified hydrogeologist to assess any potential damage to the aquifer that may result from the proposed use. The Planning Board shall engage such professional assistance as it requires to adequately evaluate such reports and to evaluate, in general, the proposed use in light of the above criteria.

5. SPECIAL EXCEPTION FOR LOTS OF RECORD

Upon application to the Board of Adjustment, a special exception shall be granted to permit the erection of a structure on a non-conforming lot within the Aquifer Protection District provided that all of the following conditions are found to exist.

- a. The lot upon which an exception is sought was an official lot of record, as recorded in the Rockingham County Registry of Deeds, prior to the date on which this amendment was posted and published in the Town.
- b. The use for which the exception is sought cannot feasibly be carried out on a portion or portions of the lot which are outside the Aquifer Protection District.
- c. Due to the provisions of the Aquifer Protection District, no reasonable and economically viable use of the lot can be made without the exception.
- d. The design and construction of the proposed use will, to the extent practical, be consistent with the purpose and intent of this Section.

6. DESIGN AND OPERATIONS GUIDELINES

Where applicable the following design and operation guidelines shall be observed within the Aquifer Protection District:

- a. Nitrate loading. No development shall cause the nitrate-nitrogen ($\text{NO}_3\text{-N}$) concentration to exceed 5 mg/l in the groundwater beyond the site.

- b. Safeguards. Provision shall be made to protect against toxic or hazardous materials discharge or loss resulting from corrosion, accidental damage, spillage, or vandalism through measures such as: spill control provisions in the vicinity of chemical or fuel delivery points; secured storage areas for toxic or hazardous materials; and indoor storage provisions for corrodable or dissolvable materials. For operations which allow the evaporation of toxic or hazardous materials into the interiors of any structures, a closed vapor recovery system shall be provided for each such structure to prevent discharge of contaminated condensate into the groundwater.
- c. Location. Where the premises are partially outside of the Aquifer Protection Overlay Zone, potential pollution sources such as on-site waste disposal systems shall be located outside the Zone to the extent feasible.
- d. Drainage. All runoff from impervious surfaces shall be recharged on the site, and diverted toward areas covered with vegetation for surface infiltration to the extent possible. Dry wells shall be used only where other methods are not feasible, and shall be preceded by oil, grease, and sediment traps to facilitate removal of contaminants.
- e. Inspection. All Conditional Uses granted under Section 4.g. of this Article shall be subject to twice-annual inspections by the Building Inspector or other agent designated by the Selectmen. The purpose of these inspections is to ensure continued compliance with the conditions under which approvals were granted. A fee for inspection shall be charged to the owner according to a fee schedule determined by the Selectmen.

7. NON-CONFORMING USES

Any non-conforming use may continue and may be maintained, repaired and improved, unless such use is determined to be an imminent hazard to public health and safety. No non-conforming use may be expanded, changed to another non-conforming use, or renewed after it has been discontinued for a period of 12 months or more.

8. ADMINISTRATION

- a. General: The provisions of the Aquifer Protection District shall be administered by the Planning Board. All development proposals, other than single or two-family residential construction not involving the subdivision of land, shall be subject to subdivision and/or site plan review and approval in accordance with Planning Board rules and regulations. Such review and approval shall precede the issuance of any building permit by the Town.
- b. Enforcement: The Board of Selectmen shall be responsible for the enforcement of the provisions and conditions of the Aquifer Protection District.

9. EFFECTIVE DATE

This Article shall become effective upon the date of passage.

SECTION V: Proposed amendments to the Shoreline Protection District of the Town of Stratham.

Summary/Status: The proposed ordinance will be submitted to the Stratham Conservation Commission for consideration with the recommendation that the existing Shoreline Protection District be amended to incorporate changes. The recommended changes include:

- the re-definition of tidal marsh;
- an expanded permitted use section including more explicit controls governing agricultural and forestry uses;
- the addition of a provision requiring a buffer strip of natural vegetation within the Shoreline Protection District;
- the addition of a conditional use provision specifying the conditions and controls under which the construction of roads and access ways may be permitted within the District;
- the addition of a section pertaining to non-conforming uses.

PROPOSED

STRATHAM SHORELAND PROTECTION DISTRICT (OVERLAY)

12.1 AUTHORITY

This section is enacted in accordance with the provisions of RSA 674:16-17 and RSA 674:20-21.

12.2 PURPOSE

The purpose of the Stratham Shoreland Protection District provisions is to protect and promote environmental quality, public health, resource conservation and the general welfare of the public, with particular attention to the special cultural and ecological significance of the Great Bay estuarine system.

The principal objectives of this Section are to:

- (1) Promote the preservation and maintenance of surface water quality in Stratham;
- (2) Conserve and protect aquatic and terrestrial habitat associated with intertidal and riparian areas;
- (3) Preserve and enhance those aesthetic values associated with the natural shoreline;
- (4) Prevent development in areas subject to periodic flooding.

12.3 DEFINITIONS

The following definitions to this Section of the Zoning Ordinance:

- (1) Shoreland. The land areas included within the Shoreland Protection District.
- (2) Shoreline. The water's edge at mean high water.
- (3) Tidal Marsh. As defined using high intensity soil mapping.
- (4) Mean High Water. As determined according to the published tables and standards of the National Ocean Survey, adjusted to the locality from such tables.

12.4 DISTRICT BOUNDARIES

The Stratham Shoreland Protection District is defined to include all of the following:

- (1) The areas of land within 150 feet horizontal distance of the shoreline of the Squamscott River and the Great Bay Estuary.

- (2) The areas of land within 150 feet horizontal distance of the upland extent of any tidal marsh adjacent to the Squamscott River and the Great Bay Estuary.
- (3) The areas of land within 100 feet horizontal distance of the seasonal high water level of all brooks and streams within the Town which appear on U.S.G.S. 7.5" (scale 1:24,000) quadrangle maps for the Town of Stratham, as revised.

12.5 USE REGULATIONS

12.5.1 Permitted Uses. The following uses are permitted within the Shoreland Protection District provided they are conducted in accordance with the purpose and intent of this Ordinance:

- (a) Any use otherwise permitted by the Zoning Ordinance and by State and Federal laws that does not involve the erection of a structure, and does not alter the surface configuration of the land by the addition of fill or by dredging, except as a common treatment associated with a permitted use listed below.
- (b) Agriculture, including grazing, hay production, truck gardening and silage production, provided that such use will not cause increases in surface or groundwater contamination by pesticides, or other toxic or hazardous substances and that such use will not cause or contribute to soil erosion and stream sedimentation. All pesticide applications shall be conducted in strict accordance with the requirements set forth in N.H. RSA 430:28 et seq. Any alteration of natural vegetation within the vegetated buffer shall comply with Section 12.6.1.
- (c) Forest Management, including the construction of access ways for said purpose and all harvests of woody vegetation for conversion of land to non-forest management/agricultural purposes. Partial cutting of trees is limited to thirty percent (30%) of the preharvest basal area for all live trees measuring six (6) inches diameter, breast height (4.5 feet above ground level), or greater. Partial cuttings shall be done in such a way that a well distributed stand of healthy growing trees remains. Clearcuts to develop improved wildlife habitat and promote forest regeneration are restricted to one quarter (1/4) acre openings dispersed throughout the Corridor Protection District. Harvesting of trees in the Corridor Protection District is limited to one cut per ten years. Salvage necessitated by acts of nature exempt property owners from the conditions of this section.
- (d) Wildlife habitat development and management.
- (e) Recreational uses consistent with the purpose and intent of this Section as defined in Section 12.2.
- (f) Conservation areas and nature trails.
- (g) Water impoundment and the construction of well water supplies.

- (h) Drainage ways to include streams, creeks, or other paths of normal runoff water and common agricultural land drainage.
- (i) The construction of fences, footbridges, catwalks, and wharves only, provided:
 - (1) Said structures are constructed on posts or pilings so as to permit the unobstructed flow of water;
 - (2) Structures do not obstruct navigation on tidal creeks;
 - (3) The natural contour of the shoreline is preserved;
 - (4) The Planning Board has reviewed and approved the proposed construction.

12.5.2 Vegetated Buffer. A buffer strip of natural vegetation 75 feet in width along the Squamscott River, the Great Bay Estuary, and associated tidal marshes, and 50 feet in width elsewhere, shall be maintained between the area of use and the shoreline or upland extent of the tidal marsh. Alteration of the vegetated buffer shall be permitted only to the extent necessitated by a permitted use or by the creation of new agricultural land not closer than 25 feet to a shoreline. All agricultural activities shall comply with Best Management Practices as prescribed by the Rockingham County Conservation District.

12.5.3 Minimum Lot Size. The minimum lot size within the Shoreland Protection District shall be the same as required in the underlying Zoning District and by applicable subdivision regulations for the Town.

12.5.4 Prohibited Uses. The following uses shall not be permitted within the Shoreland Protection District:

- (a) Disposal of solid waste (as defined by the N.H. RSA 149-M) other than brush.
- (b) On site handling, disposal, or bulk storage of hazardous or toxic materials.
- (c) Unenclosed or uncovered storage of road salt and other deicing chemicals.
- (d) Dumping of snow containing road salt or other deicing chemicals.
- (e) Commercial animal feedlots.
- (f) Junk and salvage yards.

12.5.5 Conditional Uses

- (1) A Conditional Use Permit may be granted by the Planning Board (RSA 674:21 II) for the construction of roads and other access ways, and for underground pipelines, powerlines, and other transmission lines provided that all of the following conditions are found to exist:

- (a) The proposed construction is essential to the productive use of land not within the Shoreland Protection District.
 - (b) Design and construction methods will be such as to minimize detrimental impact upon the Shoreland.
 - (c) The proposed construction design of powerlines, pipelines or other transmission lines includes provisions for restoration of the site as nearly as possible to its original grade and condition.
 - (d) No alternative route which does not cross the shoreland or has less detrimental impact on the shoreland is feasible.
- (2) Prior to the granting of a Conditional Use Permit under this Section, the applicant shall agree to submit a performance security to the Board of Selectmen. The Security shall be submitted in a form and amount, with surety and conditions satisfactory to the Selectmen and approved by Town Counsel to ensure that the construction has been carried out in accordance with the approved design. The Security shall be submitted and approved prior to issuance of any permit authorizing construction.
- (3) The Planning Board may require the applicant to submit an environmental impact assessment when necessary to evaluate an application made under this Section. The cost of this assessment shall be borne by the applicant. The Planning Board may also assess the applicant reasonable fees to cover the costs of other special investigative studies and for the review of documents required by particular applications.

12.5.6 Special Exception for Lots of Record.

- (1) A special exception shall be granted by the Board of Adjustment to permit the erection of a structure within the Shoreland Protection District provided that all of the following conditions are found to exist:
- (a) The lot upon which an exception is sought was an official lot of record, as recorded in the Rockingham County Registry of Deeds, prior to the date on which this amendment was posted and published in the Town.
 - (b) The use for which the exception is sought cannot feasibly be carried out on a portion or portions of the lot which are outside the Shoreland Protection District.
 - (c) Due to the provisions of the Shoreland Protection District, no reasonable and economically viable use of the lot can be made without the exception.
 - (d) The design and construction of the proposed use will, to the extent practical, be consistent with the purpose and intent of this Section.

(2) Procedure

Applications for Special Exceptions made to the Board of Adjustment under this Section shall be made available to the Planning Board, the Conservation Commission, and the Septic System Inspector for review and comment at least twenty (20) days prior to the public hearing of the application.

12.5.7 Non-conforming Uses:

- (a) Non-conforming uses in existence prior to the enactment of this Ordinance may be continued, maintained, repaired and improved, unless and until such use becomes an imminent hazard to public health and safety. Non-conforming uses may not be expanded or changed to other non-conforming uses.
- (b) No non-conforming use may be renewed after being discontinued for a period of 12 months or more.

12.6 OTHER PROVISIONS

12.6.1 Conflicting Provisions. In the event that the provisions of the Shoreland Protection District are found to conflict with other provisions of the Stratham Zoning Ordinance, the more restrictive shall apply.

12.6.2 Enforcement. The Building Inspector shall not issue any permit for construction within the Shoreland Protection Overlay District unless such activity conforms with the provisions of this Article. The Board of Selectmen shall have the power to enforce this Article and violations may be punishable by fines as provided by RSA 676:17.

SECTION VI: Proposed Shoreline Protection District for the Town of Greenland.

Summary/Status: The proposed Shoreline Protection Ordinance will be submitted to the Greenland Conservation Commission for consideration at the March 1990 Town Meeting. The improvements and changes recommended for Stratham's Shoreline protection Ordinance have been incorporated in the proposed ordinance for Greenland.

PROPOSED

GREENLAND SHORELAND PROTECTION DISTRICT (OVERLAY)

A. AUTHORITY

This section is enacted in accordance with the provisions of RSA 674:16-17 and RSA 674:20-21.

B. PURPOSE

The purpose of the Greenland Shoreland Protection District provisions is to protect and promote environmental quality, public health, resource conservation and the general welfare of the public, with particular attention to the special cultural and ecological significance of the Great Bay estuarine system.

The principal objectives of this Section are to:

1. Promote the preservation and maintenance of surface water quality in Greenland;
2. Conserve and protect aquatic and terrestrial habitat associated with estuarine and riparian areas;
3. Preserve and enhance those aesthetic values associated with the natural shoreline;
4. Prevent development in areas subject to periodic flooding.

C. DEFINITIONS

The following definitions to this Section of the Zoning Ordinance:

1. Shoreland. The land areas included within the Shoreland Protection District.
2. Shoreline. The water's edge at mean high water.
3. Tidal Marsh. As defined using high intensity soil mapping.
4. Mean High Water. As determined according to the published tables and standards of the National Ocean Survey, adjusted to the locality from such tables.

D. DISTRICT BOUNDARIES

The Greenland Shoreland Protection District is defined to include all of the following:

1. The areas of land within 150 feet horizontal distance of the shoreline of the Great Bay Estuary and the Winnicut River north of Route 101.

2. The areas of land within 150 feet horizontal distance of the upland extent of any tidal marsh adjacent to the Great Bay Estuary and the length of the Winnicut River described above.
3. The areas of land within 100 feet horizontal distance of the seasonal high water level of all brooks and streams within the Town which appear on U.S.G.S. 7.5" (scale 1:24,000) quadrangle maps for the Town of Greenland, as revised.

E. USE REGULATIONS

1. Permitted Uses. The following uses are permitted within the Shoreland Protection District provided they are conducted in accordance with the purpose and intent of this Ordinance:
 - a. Any use otherwise permitted by the Zoning Ordinance and by State and Federal laws that does not involve the erection of a structure, and does not alter the surface configuration of the land by the addition of fill or by dredging, except as a common treatment associated with a permitted use listed below.
 - b. Agriculture, including grazing, hay production, truck gardening and silage production, provided that such use will not cause increases in surface or groundwater contamination by pesticides, or other toxic or hazardous substances and that such use will not cause or contribute to soil erosion and stream sedimentation. All pesticide applications shall be conducted in strict accordance with the requirements set forth in N.H. RSA 430:28 et seq. Any alteration of natural vegetation within the vegetated buffer shall comply with Section 12.6.1.
 - c. Forest Management, including the construction of access ways for said purpose and all harvests of woody vegetation for conversion of land to non-forest management/agricultural purposes. Partial cutting of trees is limited to thirty percent (30%) of the preharvest basal area for all live trees measuring six (6) inches diameter, breast height (4.5 feet above ground level), or greater. Partial cuttings shall be done in such a way that a well distributed stand of healthy growing trees remains. Clearcuts to develop improved wildlife habitat and promote forest regeneration are restricted to one quarter (1/4) acre openings dispersed throughout the Corridor Protection District. Harvesting of trees in the Corridor Protection District is limited to one cut per ten years. Salvage necessitated by acts of nature exempt property owners from the conditions of this section.
 - d. Wildlife habitat development and management.
 - e. Recreational uses consistent with the purpose and intent of this Section as defined in Section B.
 - f. Conservation areas and nature trails.
 - g. Water impoundment and the construction of well water supplies.

- h. Drainage ways to include streams, creeks, or other paths of normal runoff water and common agricultural land drainage.
- i. The construction of fences, footbridges, catwalks, and wharves only, provided:
 - (1) Said structures are constructed on posts or pilings so as to permit the unobstructed flow of water;
 - (2) Structures do not obstruct navigation on tidal creeks;
 - (3) The natural contour of the shoreline is preserved;
 - (4) The Planning Board has reviewed and approved the proposed construction.
- 2. Vegetated Buffer. A buffer strip of natural vegetation 75 feet in width along the Winnicut River (north of Route 101), the Great Bay Estuary, and associated tidal marshes, and 50 feet in width elsewhere, shall be maintained between the area of use and the shoreline or upland extent of the tidal marsh. Alteration of the vegetated buffer shall be permitted only to the extent necessitated by a permitted use or by the creation of new agricultural land not closer than 25 feet to a shoreline. All agricultural activities shall comply with Best Management Practices as prescribed by the Rockingham County Conservation District.
- 3. Minimum Lot Size. The minimum lot size within the Shoreland Protection District shall be the same as required in the underlying Zoning District and by applicable subdivision regulations for the Town.
- 4. Prohibited Uses. The following uses shall not be permitted within the Shoreland Protection District:
 - a. Disposal of solid waste (as defined by the N.H. RSA 149-M) other than brush.
 - b. On site handling, disposal, or bulk storage of hazardous or toxic materials.
 - c. Unenclosed or uncovered storage of road salt and other deicing chemicals.
 - d. Dumping of snow containing road salt or other deicing chemicals.
 - e. Commercial animal feedlots.
 - f. Junk and salvage yards.
- 5. Conditional Uses
 - a. A Conditional Use Permit may be granted by the Planning Board (RSA 674:21 II) for the construction of roads and other access ways, and for underground pipelines, powerlines, and other trans-

mission lines provided that all of the following conditions are found to exist:

- (1) The proposed construction is essential to the productive use of land not within the Shoreland Protection District.
 - (2) Design and construction methods will be such as to minimize detrimental impact upon the Shoreland.
 - (3) The proposed construction design of powerlines, pipelines or other transmission lines includes provisions for restoration of the site as nearly as possible to its original grade and condition.
 - (4) No alternative route which does not cross the shoreland or has less detrimental impact on the shoreland is feasible.
- b. Prior to the granting of a Conditional Use Permit under this Section, the applicant shall agree to submit a performance security to the Board of Selectmen. The Security shall be submitted in a form and amount, with surety and conditions satisfactory to the Selectmen and approved by Town Counsel to ensure that the construction has been carried out in accordance with the approved design. The Security shall be submitted and approved prior to issuance of any permit authorizing construction.
- c. The Planning Board may require the applicant to submit an environmental impact assessment when necessary to evaluate an application made under this Section. The cost of this assessment shall be borne by the applicant. The Planning Board may also assess the applicant reasonable fees to cover the costs of other special investigative studies and for the review of documents required by particular applications.

6. Special Exception for Lots of Record.

- a. A special exception shall be granted by the Board of Adjustment to permit the erection of a structure within the Shoreland Protection District provided that all of the following conditions are found to exist:
- (1) The lot upon which an exception is sought was an official lot of record, as recorded in the Rockingham County Registry of Deeds, prior to the date on which this amendment was posted and published in the Town.
 - (2) The use for which the exception is sought cannot feasibly be carried out on a portion or portions of the lot which are outside the Shoreland Protection District.
 - (3) Due to the provisions of the Shoreland Protection District, no reasonable and economically viable use of the lot can be made without the exception.

- (4) The design and construction of the proposed use will, to the extent practical, be consistent with the purpose and intent of this Section.

b. Procedure

Applications for Special Exceptions made to the Board of Adjustment under this Section shall be made available to the Planning Board, the Conservation Commission, and the Septic System Inspector for review and comment at least twenty (20) days prior to the public hearing of the application.

7. Non-conforming Uses:

- a. Non-conforming uses in existence prior to the enactment of this Ordinance may be continued, maintained, repaired and improved, unless and until such use becomes an imminent hazard to public health and safety. Non-conforming uses may not be expanded or changed to other non-conforming uses.
- b. No non-conforming use may be renewed after being discontinued for a period of 12 months or more.

F. OTHER PROVISIONS

1. Conflicting Provisions. In the event that the provisions of the Shoreland Protection District are found to conflict with other provisions of the Greenland Zoning Ordinance, the more restrictive shall apply.
2. Enforcement. The Building Inspector shall not issue any permit for construction within the Shoreland Protection Overlay District unless such activity conforms with the provisions of this Article. The Board of Selectmen shall have the power to enforce this Article and violations may be punishable by fines as provided by RSA 676:17.

